

CLAIMS**WE CLAIM:**

1. A battery lock for a battery having a receptacle with an inner side wall and a back wall for receiving a connector for connecting the battery to an outside component, the receptacle including at least a pair of terminals projecting outwardly from the back wall of the receptacle, the receptacle having at least one transverse protuberance projecting outwardly from an inner side wall of the receptacle, comprising:

a block having an exterior side surface generally conforming to a portion of the inner side wall of the receptacle for seating within the receptacle and preventing external access to one or more of the terminals;

a locking mechanism cooperating with the block and movable between at least a first position and a second position, in the first position the locking mechanism passing by the protuberance permitting the block to be seated in and removed from the receptacle, and in the second position the locking mechanism being prevented from passing by the protuberance prohibiting the block from being removed from the receptacle; and,

a key assembly communicating with the locking mechanism to move the locking mechanism between at least the first and the second positions when a mating key is inserted into the assembly.

2. The battery lock of Claim 1 wherein the inner side wall of the receptacle is generally goggle shaped and the exterior side surface of the block is contoured similarly.

3. The battery lock of Claim 1 wherein the block has channels therein for receiving the pair of terminals.

4. The battery lock of Claim 1 wherein the block is composed of an insulated material or is metal with insulated sleeves within the channels for preventing the block from contacting the terminals.

5. The battery lock of Claim 1 wherein the block has a passageway therein for receiving portions of the key assembly and the locking mechanism.

6. The battery lock of Claim 5 wherein the key assembly is connected to the locking mechanism such that movement of the key assembly similarly moves the locking mechanism.

7. The battery lock of Claim 1 wherein the locking mechanism has at least one slot therein adapted to accommodate the protuberance as the locking mechanism to pass by the protuberance and to prevent the locking mechanism to pass by the protuberance.

8. The battery lock of Claim 7 wherein the slot in the locking mechanism has two sections, a first longitudinal section and a second transverse section.

9. The battery lock of Claim 8 wherein each section of the slot in the locking mechanism comprises a separate slot, the second transverse section being an annular slot.

10. The battery lock of Claim 1 wherein the locking mechanism includes a slot therein to permit bayonet mounting, locking and bayonet unmounting of the block within the receptacle.

11. The battery lock of Claim 1 wherein the locking mechanism is cylindrical and has a through adapted to hold an extension projecting from the key assembly and secured therein.

12. A battery lock for a battery having a receptacle with an inner side wall and a back wall for receiving a connector for connecting the battery to an outside component, the receptacle including at least a pair of terminals projecting outwardly from the back wall of the receptacle and a cavity projecting inwardly from the back wall of the receptacle between the terminals, the cavity having at least two opposed transverse protuberances projecting outwardly from an inner side wall of the cavity, comprising:

a block having an exterior side surface generally conforming to a portion of the inner side wall of the receptacle for seating within the receptacle and preventing external access to one or more of the terminals;

a locking mechanism secured to the block and projecting outwardly therefrom and extending into the cavity when the block is seated within the receptacle, the locking mechanism movable between at least a first position wherein the locking mechanism can pass by the protuberances permitting the block to be seated in and removed from the receptacle, and a second position wherein the locking mechanism is prevented from passing by the protuberances prohibiting the block from being removed from the receptacle; and,

a key assembly communicating with the locking mechanism to move the locking mechanism between at least the first and the second positions when a mating key is inserted into the assembly.

13. The battery lock of Claim 12 wherein the inner side wall of the receptacle is generally goggle shaped and the exterior side surface of the block is contoured similarly.

14. The battery lock of Claim 12 wherein the block has channels therein for receiving the pair of terminals and is composed of an insulated material.

15. The battery lock of Claim 12 wherein the block has channels therein for receiving the pair of terminals and is metal, the block further having insulative sleeves within the channels for preventing the block from contacting the terminals.

16. The battery lock of Claim 12 wherein the block has a passageway therein for receiving the generally cylindrical key assembly and the locking mechanism.

17. The battery lock of Claim 12 wherein the key assembly is connected to the locking mechanism such that rotating the key assembly similarly rotates the locking mechanism.

18. The battery lock of Claim 12 wherein the locking mechanism has a channel therein for permitting bayonet mounting, locking, and bayonet unmounting of the lock and the battery.

19. The battery lock of Claim 12 wherein the locking mechanism has at least two opposed longitudinal slots formed in an outer surface thereof adapted to accommodate the protuberances as the locking mechanism passes thereby and an annular slot to prevent the locking mechanism to pass by the protuberances.

20. The battery lock of Claim 12 wherein the locking mechanism has a longitudinal through adapted to hold an extension projecting from the key assembly therein.

21. The battery lock of Claim 20 wherein the extension projecting from the key assembly is secured by an end piece.

22. The battery lock of Claim 12 wherein the protruding member is located between the first terminal pin and the second terminal pin of the battery.

23. The battery lock of Claim 12 wherein the third cavity is located on the opposite side of the locking system from the protruding member.

24. The battery lock of Claim 12 wherein the protruding member has grooves corresponding to members on the walls of the cavity in the battery extending beyond the walls of the cavity in the battery.

25. The battery lock of Claim 12 wherein the first cavity and the second cavity include insulating walls.

26. A locking system for locking a disconnected battery, the battery having a pair of terminal pins and a cavity, wherein the cavity is located between the pair of terminal pins, the locking system comprising:

a battery lock comprising:

a first cavity for encasing a first terminal pin of the pair of battery terminal pins;

a second cavity for encasing the second terminal pin;

a protruding member for residing in the cavity of the battery, wherein the protruding member is located between the first cavity and the second cavity; and,

a third cavity for receiving a key; and,

a key corresponding to the third cavity.

27. The locking system of Claim 26 wherein the protruding member is located between the first terminal pin and the second terminal pin of the battery.

28. The locking system of Claim 26 wherein the third cavity is located on the opposite side of the locking system from the protruding member.

29. The locking system of Claim 26 wherein the protruding member has grooves corresponding to members on the walls of the cavity in the battery extending beyond the walls of the cavity in the battery.

30. The locking system of Claim 26 wherein the first cavity and the second cavity include insulating walls.

31. The locking system of Claim 26 wherein turning the key in the third cavity causes the protruding member to turn.